ABSTRACT OF THE DISCLOSURE

A device for and method of generating an uncorrelated pseudo-random bit sequence by first selecting a user-definable value K. Next, factoring $K+1$ into m prime factors $q_1, q_2, ..., q_m$, where $q_1, q_2, ..., q_m$ are ordered from smallest value q_1 to largest value q_m. Next, generating m pseudo-random sequences $r_1, r_2, ..., r_m$, where each pseudo-random bit sequence r_i is uniformly distributed over a range $(0, ..., q_i-1)$, and where $i = 1, 2, ..., m$. Finally, generating the uncorrelated pseudo-random sequence as $R = r_1 + q_1 r_2 + q_1 q_2 r_3 + ... + q_1 q_{2...} q_{m-1} r_m$.